In re Appln. of: TOYOSHIMA et al. Application No. 09/738,855

CLAIM AMENDMENTS

Amendments to existing claims:

1. (durrently Amended) A method of producing a multi-layered wiring board comprising:

forming an insulating layer of a photosensitive resin on a substrate, and exposing and developing said insulating layer to form holes having respective sizes in said insulating layer;

depositing a curable resin onto said insulating layer having the holes and filling the holes, and heating said curable resin to form a cured thin film from only a part of said curable resin at an interface of said insulating layer and said curable resin, leaving a part of said curable resin uncured; and

removing the part of said curable resin that is uncured, but not said cured thin film of said curable resin leaving via-holes where the holes were made in said insulating layer, the via-holes being smaller in size than the holes due to said cured thin film remaining in the holes on said insulating film; and

filling the via-holes with an electrical conductor, thereby forming vias.

- 2. (Previously Amended) The method of producing a multi-layered wiring board according to claim 1, wherein said photosensitive resin is at least one member selected from the group consisting of an epoxy resin, an epoxy-modified acrylate resin, a cationic polymerization product of an epoxy resin, a phenol resin, a melamine resin, a carboxy-modified epoxy acrylate, and a cinnamate.
- 3. (Previously Amended) The method of producing a multi-layered wiring board according to claim 1, wherein said curable resin comprises one of a water-soluble resin and a water-soluble cross-linking agent.
- 4. (Previously Amended) The method of producing a multi-layered wiring board according to claim 1, wherein said curable resin is at least one member selected from the group consisting of polymethylsiliceous siloxane, a melamine resin, an acrylate resin, and an epoxy resin.
- 5. (Previously Amended) The method of producing a multi-layered wiring board according to claim 1, wherein said curable resin contains rubber particles consisting of a

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butadiene-acrylonitrile copolymer, and including chemically surface-roughening said cured thin film.

- 6. (Previously Amended) The method of producing a multi-layered wiring board according to claim 2, wherein said curable resin comprises one of a water-soluble resin and a water-soluble cross-linking agent.
- 7. (Previously Amended) The method of producing a multi-layered wiring board according to claim 2, wherein said curable resin is at least one member selected from the group consisting of polymethylsiliceous siloxane, a melamine resin, an acrylate resin, and an epoxy resin.
- 8. (Previously Amended) The method of producing a multi-layered wiring board according to claim 3, wherein said curable resin contains particles of one of calcium carbonate and polybutadiene rubber.
- 9. (Previously Amended) The method of producing a multi-layered wiring board according to claim 4, wherein said curable resin contains particles of one of calcium carbonate and polybutadiene rubber.
- 10. (Previously Amended) The method of producing a multi-layered wiring board including a plurality of stages of via-holes formed by repeating the process of claim 1, wherein the via-holes of later-formed stages are smaller in size than the via-holes of earlier formed stages.